

ATSCO D.C.O.'S SINCE ACQUISITION

C=COMPLETE			P=PENDING				S=SHOP CHANGE									
PART/DWG #	PART NAME	DATE	DESCRIPTION OF CHANGE	# OF CHANGES SINCE 9/1/14	D.C.O NUMBER	STATUS	HOURS TO MAKE CHANGE	Eng Hourly Rate	Total Eng Cost	SHOP ORDER #	SEQ. #	MACHINE #	OPERATION	SETUP TIME	Production Hourly Rate	Total Production Cost
1-RP3KD3	ANNULUS HEAD	9/25/2014	CORRECTED CASTELLATION	4	1-RP3KD3-H	S	1.5	200.00	300.00	I07266-1, I00650-1	3	336	Hone	1	\$90.00	\$90.00
1-RP3KD3-P	ANNULUS HEAD	9/29/2014	1.998/1.992 WAS 2.006/2.000, 15° WAS 10°, 2.235/2.230 WAS 2.240	3	1-RP3KD3-P-D	S	3.0	200.00	600.00	I07146-1-0	2.00	122	TURN 1	2.00	\$90.00	\$180.00
1-RP6KD5	ANNULUS HEAD	1/21/2015	RELOCATED DIMENSION PER HY-TECH	2	1-RP6KD5-F	S	1.5	200.00	300.00	I07330-1-0	2.00	122	TURN 1	2.00	\$90.00	\$180.00
1-RP6KD5-P	ANNULUS HEAD	3/26/2015	CORRECTED ORIENTATION OF BUSHING	1	1-RP6KD5-B	S	1.5	200.00	300.00	I07267-1-0	1.00	160	Hard Turn	1.00	\$90.00	\$90.00
2-C20	PISTON	9/15/2015	TURN Ø1.136/1.133 WAS TURN Ø1.150/1.145	1	2-C20-C	C	1.5	200.00	300.00	I08203-1-0	2.00	345	GRIND CENTERLESS	2.00	\$90.00	\$180.00
2-C25	PISTON	9/16/2015	TURN Ø1.136/1.133 WAS TURN Ø1.150/1.145 ADDED DOUBLE DRAW	1	2-C25-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00
2-CPR5X	PISTON	9/16/2015	COMBINED MACHINE AND GRIND PRINTS	1	2-CPR5X-E	C	1.5	200.00	300.00					0	\$90.00	\$0.00
2-RB204	PISTON	8/12/2015	REMOVED SHOT PEEN	2	2-RB204-D	C	1.5	200.00	300.00					0	\$90.00	\$0.00
2-RB206	PISTON	8/11/2015	REMOVED SHOT PEEN	2	2-RB206-D	C	1.5	200.00	300.00	I08136-1-0	2.00	345	GRIND CENTERLESS	1.00	\$90.00	\$90.00
2-RB208	PISTON	8/12/2015	REMOVED SHOT PEEN	2	2-RB208-E	C	1.5	200.00	300.00	I08046-1-0	3.00	345	GRIND CENTERLESS	1.00	\$90.00	\$90.00
2-RB211	PISTON	8/12/2015	REMOVED SHOT PEEN	2	2-RB211-G	C	1.5	200.00	300.00					0	\$90.00	\$0.00
2-RB214	PISTON	8/12/2015	REMOVED SHOT PEEN	2	2-RB214-C	C	1.5	200.00	300.00					0	\$90.00	\$0.00
2-RBAX	PISTON	3/4/2015	REMOVED STAMPING NOTE	2	2-RBAX-E	P	1.5	200.00	300.00					0	\$90.00	\$0.00
8-4181	LOCK KEY	12/1/2014	ADDED BLACK OXIDE NOTE	1	8-4181-E	C	1.5	200.00	300.00					0	\$90.00	\$0.00
9RB-4BOX	VALVE CHEST	7/27/2015	1.695 WAS 1.656	1	9RB-4BOX-D	C	1.5	200.00	300.00	I07391-1-0	1.00	153	TURN 1	3.00	\$90.00	\$270.00
9RB-4LID	VALVE BOX	2/16/2016	REDRAWN IN CAD, 1.687 WAS 1.671	2	9RB-4LID-C	P	1.5	200.00	300.00	I08233-1-0	1.00	153	TURN 1	3.00	\$90.00	\$270.00
12-171615	RETAINER	2/17/2015	1.500 WAS 2.007	1	12-171615-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00
25-3312	THROTTLE VALVE	3/11/2015	ADDED NOTE: R0.040 MAX. TYP. CORNERS	1	25-3312-A	C	1.5	200.00	300.00					0	\$90.00	\$0.00
25-3J	THROTTLE VALVE ASSY	4/5/2016	REMOVED H.T.	1	25-3J	P	1.5	200.00	300.00					0	\$90.00	\$0.00
26-1788	SPRING, GROUND ENDS	5/11/2015	CHANGED TOLERANCE, MATERIAL: ASTM A228 MUSIC WIRE	1	26-1788	S	1.5	200.00	300.00					0	\$90.00	\$0.00
28-0312-0930	PIN	1/15/2016	0.913 ± 0.005 WAS 0.930	2	28-0312-0930-C	C	1.5	200.00	300.00					0	\$90.00	\$0.00
28-0312-1125	PIN	1/18/2016	1.113 ± 0.005 WAS 1.125/1.115	2	28-0312-1125-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00
28-0312-1625	PIN	4/17/2015	CHANGED ANGLE OF CHAMFER	3	28-0312-1625-D	C	1.5	200.00	300.00					0	\$90.00	\$0.00
28-0375-1500-S7	PIN	1/22/2016	1.513 ± 0.005 WAS 1.495	2	28-0375-1500-S7-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00
28-0437-1750-S7	PIN	4/16/2015	CHANGED CHAMFER TO 30° FROM 15°	3	28-0437-1750-S7-C	C	1.5	200.00	300.00					0	\$90.00	\$0.00
28-0437-2000-S7	PIN	2/25/2015	ADDED MACHINE TOLERANCE	3	28-0437-2000-S7-D	C	1.5	200.00	300.00					0	\$90.00	\$0.00
28-P90	PUSH PIN	3/19/2015	MODIFIED DIM FOR CLARITY	1	28-P90-B	S	1.5	200.00	300.00					0	\$90.00	\$0.00
30-RB08	CAP	12/1/2014	ADDED BLACK OXIDE NOTE	1	30-RB08-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00
31-18	LEVER	3/26/2015	REDRAWN IN CAD TO MATCH ATSCO SAMPLE FROM INVENTORY	1	31-18-A	C	12.0	200.00	2,400.00					0	\$90.00	\$0.00
31-RB08	LEVER	3/18/2015	1/8 WAS 7/32, R1/2 WAS R3/8, 0.404 WAS 0.520, 63/64 WAS 1 1/8, R1" WAS R7/8	1	31-RB08-D	C	6.0	200.00	1,200.00					0	\$90.00	\$0.00
31-RP	TRIGGER	9/26/2014	ADDED RADIUS CALLOUT	2	31-RP-G	C	1.5	200.00	300.00	I07715-1, I00615-1				0	\$90.00	\$0.00
36-341	EXHAUST DEFLECTOR	8/4/2015	REDRAWN IN CAD, REMOVED 3/64 TWIST, ADDED BLACK OXIDE / OIL DIP NOTE	1	36-341-A	C	6.0	200.00	1,200.00	21414-1, I07975-1	1	106	TURN 1	1	\$90.00	\$90.00
36-G25S	MUFFLER DEFLECTOR	9/10/2015	BLACK OXIDE / OIL DIP WAS NICKEL PLATE	1	36-G25S-D	C	1.5	200.00	300.00					0	\$90.00	\$0.00
36-G500	EXHAUST DEFLECTOR	3/2/2015	ADDED BLACK OXIDE / OIL DIP NOTE	1	36-G500-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00
40-A90	PISTON RETAINER	12/12/2014	ADDED Ø1.093	1	40-A90-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00
40-RB208	PISTON RETAINER	8/26/2015	REMOVED R0.02, ADDED NOTE	2	40-RB208-F	P	1.5	200.00	300.00	I08143-1-0	1.00	153	TURN 1	3.00	\$90.00	\$270.00
40-RB208SPC	PISTON RETAINER	11/7/2016	ADDED NO BREAK EDGE NOTE	1	40-RB208SPC-B	P	1.5	200.00	300.00					0	\$90.00	\$0.00
45B-4	SCREEN RETAINER	12/1/2014	ADDED BLACK OXIDE NOTE	1	45B-4-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00

46-CPC	LOCK RING	4/1/2015	ADDED SPLINE DATA, 2.400/2.397 WAS 2.415/2.420	1	46-CPC-A	C	3.0	200.00	600.00					0	\$90.00	\$0.00
46-RBA	LOCK RING	3/30/2015	ADDED VIEW WITH CHECK GAGE	2	46-RBA-D	P	6.0	200.00	1,200.00	I07216-1-0	2.00	128	TURN 1	2.00	\$90.00	\$180.00
47-4999	LOCK RING	1/20/2015	ADDED MISSING DIMENSIONS AND CORRECTED MATERIAL CALLOUT	1	47-4999-A	S	1.5	200.00	300.00					0	\$90.00	\$0.00
52-4181	VALVE CASE LID	6/19/2015	86L20 WAS 8620, CARB. .010-.015 DP. WAS .020-.025 DP., ADDED NOTE	1	52-4181-B	C	1.5	200.00	300.00	I08420-1-0	1.00	143	TURN 1	4.00	\$90.00	\$360.00
52-C20	VALVE CHEST CAP	11/18/2015	8620 WAS FATIGUE PROOF STEEL, H & D 56-58 Rc, CARB. .015-.018 WAS Rc 28-32	1	52-C20-C	C	1.5	200.00	300.00	I08157-1-0	1.00	153	TURN 1	3.00	\$90.00	\$270.00
52-CPR	VALVE BOX LID	3/4/2015	RADIUS CHANGED FROM 1/8 TO 0.156	3	52-CPR-E	C	3.0	200.00	600.00	I07976-1-0	1.00	143	TURN 1	4.00	\$90.00	\$360.00
52-RB08	VALVE BOX CAP	6/22/2015	CHANGED MATERIAL AND H.T.	2	52-RB08-F	C	12.0	200.00	2,400.00	I07655-1-0	1.00	143	TURN 1	3.00	\$90.00	\$270.00
52-RBA	VALVE BOX LID	6/19/2015	86L20 WAS 8620, CARB. .010-.015 DP. WAS .020-.025 DP., ADDED NOTE	1	52-RBA-D	C	1.5	200.00	300.00	I07839-1-0	1.00	143	TURN 1	4.00	\$90.00	\$360.00
53-4181	VALVE BOX	6/22/2015	86L20 WAS 8620, CARB. .010-.015 DP. WAS .020-.025 DP., ADDED NOTE	1	53-4181-F	C	1.5	200.00	300.00	I07838-1-0	1.00	143	TURN 1	4.00	\$90.00	\$360.00
53-C20	VALVE BLOCK	3/24/2016	7" TYP. WAS 5", ADDED NOTE	1	53-C20-F	P	3.0	200.00	600.00	I08207-1-0	1.00	143	TURN 1	4.00	\$90.00	\$360.00
53-CPR	VALVE BOX	6/19/2015	86L20 WAS 8620, CARB. .010-.015 DP. WAS .020-.025 DP., ADDED NOTE	1	53-CPR-F	C	1.5	200.00	300.00	I07978-1-0	1.00	143	TURN 1	5.00	\$90.00	\$450.00
53-RB08	VALVE BOX	6/22/2015	86L20 WAS 8620, CARB. .010-.015 DP. WAS .020-.025 DP., ADDED NOTE	1	53-RB08-F	C	1.5	200.00	300.00	I07825-1-0	1.00	143	TURN 1	3.00	\$90.00	\$270.00
53-RBA	VALVE BOX	6/19/2015	ADDED NOTE, CHANGED H.T.	2	53-RBA-D	C	3.0	200.00	600.00	I07824-1-0	1.00	143	TURN 1	3.00	\$90.00	\$270.00
54-73	MAIN VALVE	3/2/2016	REDRAWN IN CAD, 4140 HT WAS 4615, ADDED BLACK OXIDE / OIL DIP	1	54-73	P	9.0	200.00	1,800.00	I08516-1-0	2.00	271	MILL 1	4.00	\$90.00	\$360.00
54-4181	VALVE	4/26/2016	Ø1.180/1.178 WAS Ø1.185/1.183	1	54-4181	P	1.5	200.00	300.00	I08418-1-0	1.00	154	TURN 1	4.00	\$90.00	\$360.00
54-CPR	VALVE	11/13/2015	TURN Ø1.511/1.508 / GRIND Ø1.4987/1.4984 WAS TURN Ø1.514/1.511 / GRIND Ø1.4992/1.4988	1	54-CPR-D	C	3.0	200.00	600.00	I07977-1-0	1.00	143	TURN 1	4.00	\$90.00	\$360.00
54-83X	VALVE	8/7/2015	1.180/1.178 WAS 1.183/1.181	1	54-83X-H	S	1.5	200.00	300.00	I08050-1-0	1.00	153	TURN 1	3.00	\$90.00	\$270.00
56-9A	VALVE BOX PIN	9/22/2016	REDRAWN IN CAD, HARDENED DOWEL WAS 0.180 DIA. GROUND (#01) DRILL ROD	1	56-9A-A	P	3.0	200.00	600.00	I07731-1-0	2.00	159	TURN 1	1.00	\$90.00	\$90.00
69-650	THROTTLE BODY	10/28/2015	REDRAWN IN CAD	1	69-650-D	C	18.0	200.00	3,600.00	I08658-1-0	2.00	122	TURN 1	3.00	\$90.00	\$270.00
69-RB08	RB08 HANDLE	3/21/2016	CHANGED TEETH DIMENSIONS	1	69-RB08-E	P	3.0	200.00	600.00					0	\$90.00	\$0.00
82-401	LEVER	1/7/2016	REMOVED H.T.	1	82-401-J	S	1.5	200.00	300.00					0	\$90.00	\$0.00
82A-P88A	LOCK FLAT PATTERN	9/23/2014	SHORTENED BLANK OVERALL LENGTH	3	82A-P88A-E	C	1.5	200.00	300.00	I08172-1, I00346-1	2.00	525	Layout/Stamp	0.5	\$90.00	\$45.00
85-2500S	HANDLE GRIP	2/6/2015	ADDED 5/8 X 1-1/2 LONG SHOT, ADDED NOTE	1	85-2500S-C	C	3.0	200.00	600.00	I08172-1-0	2.00	225	MILL 1	0.50	\$90.00	\$45.00
87-43R	BACKHEAD	6/23/2016	0.655 WAS 0.635, 0.157 WAS 3/16	1	87-43R	P	6.0	200.00	1,200.00	I08519-1-0	2.00	204	MILL 1	3.00	\$90.00	\$270.00
87-GV16P	GOVERNOR HOUSING SPACER	9/29/2015	REMOVED Ø2-3/64 X 45° CHAMFER, ADDED R.125 SLOT AND ASSOCIATED DIMENSIONS	1	87-GV16P-A	C	24.0	200.00	4,800.00					0	\$90.00	\$0.00
87-RP	BACKHEAD	2/26/2015	DRAWING ERROR: MATERIAL CHANGED FROM PLAIN CARBON STEEL TO 2024 ALUM.	1	87-RP-C	C	1.5	200.00	300.00	I08257-1-0	1.00	144	TURN 1	3.00	\$90.00	\$270.00
90-155-MPT	CYLINDER	5/20/2015	ADDED TURN Ø1.917/1.915, ADDED TURN Ø1.444/1.442, ADDED TURN 2.387/2.385	1	90-155-MPT-D	C	1.5	200.00	300.00	I07792-1	3.00	460	Deburr	0.50	\$90.00	\$45.00
90-77H	LINER	11/30/2015	0.220 DEEP WAS 0.156 DEEP	1	90-77H-F	C	1.5	200.00	300.00	I08395-1-0	1.00	153	TURN 1	4.00	\$90.00	\$360.00
90-301 BARE	CYLINDER	5/13/2015	0.150 DEEP WAS 0.100 DEEP	3	90-301 BARE-B	C	1.5	200.00	300.00	I07748-1	3.00	338	Hone	0.50	\$90.00	\$45.00
90-401	CYLINDER LINER	4/28/2015	REMOVED H.T., CHANGED TURN SIZES	1	90-401-F	C	3.0	200.00	600.00	I07887-1	2.00	271	MILL 1	2.00	\$90.00	\$180.00
90-601	CYLINDER	5/24/2016	ADDED ALTERNATE MACHINING	1	90-601-D	P	6.0	200.00	1,200.00	I08645-1-0	1.00	130	TURN 1	3.00	\$90.00	\$270.00
90-ATP-REV	CYLINDER	11/18/2014	REDRAWN IN SOLIDWORKS	5	90-ATP-REV-E	C	1.5	200.00	300.00	I07804-1	3	460	Deburr	0.50	\$90.00	\$45.00
90A-241	BARREL	6/17/2015	ADDED 1/4 REAM HOLES	3	90A-241-L	P	3.0	200.00	600.00					0	\$90.00	\$0.00
90A-792	BARREL	9/20/2016	Ø0.250 WAS Ø0.313, Ø1.493 WAS Ø1.483/1.481, MODIFIED U' CUT	1	90A-792-G	P	6.0	200.00	1,200.00					0	\$90.00	\$0.00
90A-4181-8	BARREL	3/21/2016	ADDED MACHINE LETTERS	1	90A-4181-8-E	P	3.0	200.00	600.00	I08478-1-0	5.00	260	MILL 1	3.00	\$90.00	\$270.00
90A-C20C	BARREL	3/4/2015	1.988/1.986 WAS 1.996/1.993	1	90A-C20C-B	C	1.5	200.00	300.00	I07547-1	1.5	235	DRILL 1	1.50	\$90.00	\$135.00

90A-C30C	BARREL	3/5/2015	1.988/1.986 WAS 1.996/1.993, 2.370/2.365 WAS 2.375	1	90A-C30C-B	C	3.0	200.00	600.00	I08448-1	1	235	DRILL 1	1.50	\$90.00	\$135.00
90A-IR2	BARREL	3/5/2015	1.988/1.986 WAS 1.991/1.988, 2.370/2.365 WAS 2.385/2.365	1	90A-IR2-Q	C	3.0	200.00	600.00					0	\$90.00	\$0.00
90A-IR3	BARREL	3/5/2015	1.988/1.986 WAS 1.997, 2.370/2.365 WAS 2.385/2.365	1	90A-IR3-H	C	3.0	200.00	600.00					0	\$90.00	\$0.00
90A-K2L	BARREL	6/27/2016	ADDED OPTIONAL MACHINING	1	90A-K2L-F	P	6.0	200.00	1,200.00	I08235-1-0	4.00	211	DRILL 1	5.00	\$90.00	\$450.00
90A-MPT06	BARREL	9/18/2015	Ø1.178/1.176 BORE WAS Ø1.170 BORE, Ø2.304/2.302 TURN WAS TURN Ø2.300/2.298	1	90A-MPT06-A	C	3.0	200.00	600.00	I07246-1-0	5.00	260	MILL 1	3.00	\$90.00	\$270.00
90A-RB08	BARREL	9/18/2015	Ø1.178/1.176 BORE WAS Ø1.170 BORE, Ø2.304/2.302 TURN WAS TURN Ø2.300/2.298	1	90A-RB08-I	C	3.0	200.00	600.00	I07680-1-0	5.00	260	MILL 1	4.00	\$90.00	\$360.00
90A-RB11	BARREL	9/18/2015	Ø1.178/1.176 BORE WAS Ø1.170 BORE, Ø2.304/2.302 TURN WAS TURN Ø2.300/2.298	1	90A-RB11-I	C	3.0	200.00	600.00	I07649-1-0	5.00	260	MILL 1	4.00	\$90.00	\$360.00
90A-RBA41	BARREL	3/5/2015	2.373/2.371 WAS 2.384/2.382, 2.399/2.396 WAS 2.409/2.407	1	90A-RBA41-D	C	3.0	200.00	600.00					0	\$90.00	\$0.00
90A-RBA61	BARREL	3/5/2015	2.373/2.371 WAS 2.384/2.382, 2.399/2.396 WAS 2.409/2.407	1	90A-RBA61-D	C	3.0	200.00	600.00	I07650-1-0	1.00	235	DRILL 1	1.00	\$90.00	\$90.00
90A-RBA90	BARREL	12/16/2014	CHANGED MACHINE DIMENSION FROM 1.045 TO 1.048	3	90A-RBA90-L	C	3.0	200.00	600.00	I07245-1-0	5.00	260	MILL 1	5.00	\$90.00	\$450.00
90A-RBA91	BARREL	3/5/2015	2.373/2.371 WAS 2.384/2.382, 2.399/2.396 WAS 2.409/2.407	1	90A-RBA91-H	C	3.0	200.00	600.00	I07247-1-0	5.00	260	MILL 1	3.00	\$90.00	\$270.00
90A-RP	HANDLE	5/4/2015	CORRECTED FLAT DIMENSIONS	2	90A-RP-K	C	9.0	200.00	1,800.00	I08063-1-0	2.00	260	MILL 1	4.00	\$90.00	\$360.00
92-RP	DOWEL PIN	7/7/2015	Ø5/32 WAS 0.188, 2.823/2.813 WAS 2.825 ± 0.002	1	92-RP-D	C	1.5	200.00	300.00					0	\$90.00	\$0.00
201-608	SPINDLE	6/23/2015	COMBINED MACHINE AND GRIND, REMOVED ELECTROLIZE AND ASSOCIATED DIMENSIONS	1	201-608-E	C	9.0	200.00	1,800.00	I07631-1	2.00	348	CYL. GRIND	2.5	\$90.00	\$225.00
201-1900	SPINDLE	7/13/2015	REMOVED ELECTROLIZE NOTE, REMOVED 0.6866/0.6862 BEFORE ELECTROLIZE	1	201-1900-E	C	1.5	200.00	300.00	I07612-1	1.00	348	CYL. GRIND	0.50	\$90.00	\$45.00
201-6600E	SPINDLE	4/27/2015	CHANGED DIMS.	2	201-6600E/B91-I	C	1.5	200.00	300.00	I07471-1	3.00	129	Hard Turn	2.00	\$90.00	\$180.00
201-A712-5/8	SPINDLE	10/12/2015	Ø0.750 +0.000/-0.010 WAS Ø0.875/0.865 ACROSS	1	201-A712-5/8-A	C	3.0	200.00	600.00					0.00	\$90.00	\$0.00
201-ATP	LONG SPINDLE GEAR	3/11/2015	CORRECTED GEAR DATA	2	201-ATP-C	C	3.0	200.00	600.00	I08154-1	2.00	347	CYL. GRIND	1.00	\$90.00	\$90.00
201-G13B	SPINDLE	11/23/2015	4340 HT WAS 4340, REMOVED 46-48 Rc, REMOVED ELECTROLIZE AND DIMENSIONS	1	201-G13B-J	C	3.0	200.00	600.00					0	\$90.00	\$0.00
201-G25RAD	WORK SPINDLE	5/6/2015	COMBINED MACHINE AND GRIND PRINTS TO MAKE ONE DRAWING	1	201-G25RAD-N	C	3.0	200.00	600.00	I07897-1	2.00	159	Hard Turn	1.5	\$90.00	\$135.00
201-GV16	LONG SPINDLE	10/27/2015	CHANGED H.T.	1	201-GV16	S	4.5	200.00	900.00	I07963-1-0	1.00	153	TURN 1	3.00	\$90.00	\$270.00
201-RP3008-XX	2000-3000 EXT. SHAFT	9/29/2016	1.25 WAS 1.20, 1.338 WAS 1.288	1	201-RP3008-XX	P	4.5	200.00	900.00					0	\$90.00	\$0.00
201-RP3075-XX	2000-3000 SQ. DR. EXT.	9/1/2016	MODIFIED SQUARE	1	201-RP3075-XX-F	P	4.5	200.00	900.00	I08187-1-0	3.00	225	MILL 1	0.50	\$90.00	\$45.00
201-RP6000-XX	SQUARE DRIVE EXT.	8/24/2016	ADDED Ø0.350 HOLE	1	201-RP6000-XX	P	4.5	200.00	900.00					0	\$90.00	\$0.00
201-RP6001-XX	RP6000 EXT. SHAFT	11/3/2014	REMOVED 9" AND ADDED 12"	2	201-RP6001-XX	P	3.0	200.00	600.00					0	\$90.00	\$0.00
202-77H	FRONT END PLATE	1/27/2016	1.2604/1.2598 WAS 1.2661/1.2551	1	202-77H-E	S	1.5	200.00	300.00					0	\$90.00	\$0.00
202-RP	END PLATE	12/12/2014	ADDED 0.125 DEEP DIMENSION ON SLOT	3	202-RP-I	C	1.5	200.00	300.00	I08278-1, I00272-1	1	140	TURN 1	1	\$90.00	\$90.00
203-RP	END PLATE	10/20/2016	1.1002/1.1017 WAS 1.1029/1.1024	1	203-RP-B	P	1.5	200.00	300.00	I07185-1, I00273-1	1	144	Turn 1	1	\$90.00	\$90.00
206-15S-MPT	ROTOR	3/24/2015	ADDED THREAD DEPTH TO 5/16-18 THREAD	1	206-15S-MPT-F	C	1.5	200.00	300.00	I07550-1-0	1.00	348	CYL. GRIND	2.00	\$90.00	\$180.00
206-3312	ROTOR	4/29/2015	0.345/0.347 WAS 0.315/0.317, 0.072 WAS 0.060	1	206-3312/B14-E	C	3.0	200.00	600.00					0	\$90.00	\$0.00
206-G25-3/8	ROTOR	5/6/2015	COMBINED MACHINE AND GRIND PRINTS TO MAKE ONE DRAWING	1	206-G25-3/8-G	C	9.0	200.00	1,800.00	I07898-1-0	1.00	273	MILL 1	3.00	\$90.00	\$270.00
206-RP	ROTOR	12/17/2015	ADDED H.T.; H & D 46-49 Rc	1	206-RP-H	C	1.5	200.00	300.00	I08002-1-0	1.00	155	TURN 1	3.00	\$90.00	\$270.00
207-MET-1	FRONT END CAP	1/26/2015	ADDED MISSING DIMENSION	3	207-MET-1-C	C	1.5	200.00	300.00					0	\$90.00	\$0.00
207-MET-2	CAP INSERT	1/23/2015	CHANGED DIMS BY CUSTOMER REQUEST	2	207-MET-2-C	C	1.5	200.00	300.00					0	\$90.00	\$0.00
210-302GL	WHEEL WASHER	12/19/2014	REMOVED H.T., 4140 H.T. WAS 4140	1	210-302GL-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00

213-8313	COLLET	12/16/2014	CHANGED 3 PLACES @120° TO 4 PLACES EQUALLY SPACED AROUND CENTERLINE	1	213-8313-B	C	3.0	200.00	600.00					0	\$90.00	\$0.00
216-ATP	GEAR CASE	4/16/2015	REDRAWN IN CAD, ADDED GEAR DATA	1	216-ATP	S	12.0	200.00	2,400.00					0	\$90.00	\$0.00
216-ATP-1	RING GEAR	3/11/2015	CORRECTED GEAR DATA	1	216-ATP-1-B	S	1.5	200.00	300.00					0	\$90.00	\$0.00
216-MET-DA	DRIVE ANNULUS	2/24/2015	CHANGED MATERIAL FROM 4140 PHT	2	216-MET-DA	C	3.0	200.00	600.00					0	\$90.00	\$0.00
216-RP05-DA	DRIVE ANNULUS	12/10/2014	UPDATED DIMENSION TO MATCH REV. C AND MADE IT A REFERENCE DIM.	1	216-RP05-DA-E	S	1.5	200.00	300.00	I07176-1-0	2.00	128	TURN 1	2.50	\$90.00	\$225.00
216-RP1KD2-DA	DRIVE ANNULUS	9/26/2014	CORRECTED CASTELLATION	3	216-RP1KD2-DA-F	C	6.0	200.00	1,200.00	I07173-1-0	2.00	128	TURN 1	2.00	\$90.00	\$180.00
216-RP1KD2-DA-1	DRIVE ANNULUS	9/26/2014	CORRECTED CASTELLATION	3	216-RP1KD2-DA-1-H	S	1.5	200.00	300.00	I07300-1-0	2.00	150	TURN 1	2.00	\$90.00	\$180.00
216-RP1KD2-DA-1-P	DRIVE ANNULUS	9/26/2014	CORRECTED CASTELLATION	3	216-RP1KD2-DA-1-P-D	S	1.5	200.00	300.00	I07132-1-0	2.00	126	TURN 1	2.00	\$90.00	\$180.00
216-RP1KD2-H S A	ANNULUS, HIGH SPEED	11/3/2015	0.505 ± 0.002 WAS 0.516 ± 0.002	1	216-RP1KD2-HAS-G	C	1.5	200.00	300.00					0	\$90.00	\$0.00
216-RP1KD2-DA	DRIVE ANNULUS	9/26/2014	CORRECTED CASTELLATION	3	216-RP1KD2-DA-F	C	6.0	200.00	1,200.00					0	\$90.00	\$0.00
216-RP2KD4-DA	DRIVE ANNULUS	9/26/2014	CORRECTED CASTELLATION	4	216-RP2KD4-DA-M	S	1.5	200.00	300.00	I07298-1, I00571-1	1	128	Turn 1	3	\$90.00	\$270.00
216-RP2KD4-DA-P	DRIVE ANNULUS	9/26/2014	CORRECTED CASTELLATION	4	216-RP2KD4-DA-P-E	S	1.5	200.00	300.00	I07138-1-0	2.00	128	TURN 1	2.00	\$90.00	\$180.00
216-RP2KD4-H S A	ANNULUS, HIGH SPEED	10/13/2014	CHANGED O-RING GROOVE AND MADE COUNTER-BORE DEEPER	2	216-RP1KD2-HAS-F	P	1.5	200.00	300.00					0	\$90.00	\$0.00
216-RP3KD3-DA	DRIVE ANNULUS	3/19/2015	REMOVED INCORRECT DIMS.	2	216-RP3KD3-DA-K	S	1.5	200.00	300.00	I07311-1-0	2.00	128	TURN 1	2.00	\$90.00	\$180.00
216-RP3KD3-DA-P	DRIVE ANNULUS	10/13/2014	ADD NOTE AND CHANGE TO A GH7 TAP	3	216-RP3KD3-DA-P-D	S	1.5	200.00	300.00					0	\$90.00	\$0.00
216-RP6KD5-DA	DRIVE ANNULUS	10/13/2014	INCREASE SIZE OF O-RING GROOVE	2	216-RP6KD5-DA-L	S	1.5	200.00	300.00	I07297-1				0	\$90.00	\$0.00
216-RP6KD5-DA-P	DRIVE ANNULUS	10/16/2014	ADDED MASKING NOTE CHANGE TO GH7 TAP, AND INCREASE DIAMETER OF O-RING GROOVE	2	216-RP6KD5-DA-P-C	S	1.5	200.00	300.00					0	\$90.00	\$0.00
217-601-1	GOVERNOR SPINDLE	12/17/2015	ADDED H.T. NOTE, WAS NO CASE THREADS CARBURIZE .012-.017 DP H & D 58-60 Rc, MATERIAL 41L40 WAS LEDLOY	1	217-601-1-D	C	1.5	200.00	300.00					0	\$90.00	\$0.00
217-4999	GOVERNOR SPINDLE	6/18/2015	MATERIAL FATIGUE PROOF WAS LEDLOY, REMOVED H.T.	1	217-4999-B	C	1.5	200.00	300.00					0	\$90.00	\$0.00
218-4999	ADJUSTING NUT	12/22/2014	360 BRASS WAS LEDLOY	1	218-4999-B	C	1.5	200.00	300.00	I07462-1-0	1.00	126	TURN 1	2.50	\$90.00	\$225.00
222-RP1KD2-DS	BEARING SLEEVE	10/7/2014	REMOVED Ø0.3145/0.3140 HONE	1	222-RP1KD2-DS-B	C	3.0	200.00	600.00					0	\$90.00	\$0.00
222-RP2KD4-DS	BEARING SLEEVE	10/7/2014	REMOVED Ø0.3145/0.3140 HONE	1	222-RP2KD4-DS-B	C	3.0	200.00	600.00					0	\$90.00	\$0.00
222-RP3KD3-DS	BEARING SLEEVE	9/24/2014	REMOVED Ø0.4395/0.4390 HONE	1	222-RP3KD3-DS-E	C	3.0	200.00	600.00	I07151-1-0	1.00	160	TURN 1	3.00	\$90.00	\$270.00
222-RP6KD5-DS	BEARING SLEEVE	9/24/2014	REMOVED Ø0.4395/0.4390 HONE	1	222-RP6KD5-DS-D	C	3.0	200.00	600.00	I07156-1-0	1.00	160	TURN 1	3.00	\$90.00	\$270.00
224-302	GEAR PINION	7/17/2015	MATERIAL 4820 WAS S7, H & D 79-81 RA WAS 58-60 Rc, ADDED CARBURIZE .015-.020 DEEP	1	224-302-G	C	1.5	200.00	300.00					0	\$90.00	\$0.00
224-ATP	PLANETARY GEAR	3/11/2015	CORRECTED GEAR DATA	1	224-ATP-C	S	1.5	200.00	300.00	I08190-1	2	336	Hone	0.5	\$90.00	\$45.00
224-MET-SUN	PINION GEAR	2/23/2015	REVISED MACHINE AND HONE DIMENSIONS ON BORE	1	224-MET-SUN-H	S	1.5	200.00	300.00	I07948-1	1	336	Hone	0.5	\$90.00	\$45.00
224Z-31H	ZERO BEVEL GEAR	3/3/2016	4820 WAS 86L20	1	224Z-31H	P	1.5	200.00	300.00	I08066-1-0	1.00	161	TURN 1	3.50	\$90.00	\$315.00
230-RP	GASKET	11/7/2014	ADDED MATERIAL CALLOUT	1	230-RP-C	S	1.5	200.00	300.00					0	\$90.00	\$0.00
233-604	BEARING HOUSING	10/22/2015	REDRAWN IN CAD ON HY-TECH TITLE BLOCK	1	233-604-G	C	24.0	200.00	4,800.00					0	\$90.00	\$0.00
233-613-3	EXTENSION HOUSING	2/19/2015	2 PC. WELDMENT WAS 1 PC.	2	233-613-3-D	C	3.0	200.00	600.00	I07645-1, I00131-1	1	140	Turn 1	1.75	\$90.00	\$157.50
233-613-7	EXTENSION HOUSING	2/19/2015	2 PC. WELDMENT WAS 1 PC.	2	233-613-7-D	C	3.0	200.00	600.00					0	\$90.00	\$0.00
233-613H1	EXTENSION HOUSING	2/20/2015	3 PC. WELDMENT WAS 1 PC.	3	233-613H1-H	C	3.0	200.00	600.00					0	\$90.00	\$0.00
233-RP3017-XX	NOSE EXT. BODY	9/29/2016	0.420 WAS 0.450	1	233-RP3017-XX	P	1.5	200.00	300.00					0	\$90.00	\$0.00
244-3306	GEAR PINION	7/17/2015	MATERIAL 4820 WAS S7, H & D 79-81 RA WAS 58-60 Rc, ADDED CARBURIZE .015-.020 DEEP	1	244-3306-D	C	1.5	200.00	300.00					0.00	\$90.00	\$0.00
244Z-31H	PINION SHAFT	3/3/2016	4820 WAS 86L20	2	244Z-31H-M	P	3.0	200.00	600.00	I08575-1-0	4.00	347	CYL. GRIND	1.50	\$90.00	\$135.00
245A-601	GOVERNOR BODY	10/31/2016	ADDED BLACK OXIDE, LASER	1	245A-601-B	P	3.0	200.00	600.00					0	\$90.00	\$0.00
245A-G13B	GOVERNOR BODY	10/29/2015	REMOVED H.T. NOTE	1	245A-G13B/B21-AA	C	1.5	200.00	300.00					0	\$90.00	\$0.00
245A-4999	GOVERNOR BODY	10/31/2016	ADDED BLACK OXIDE, LASER	1	249A-4999-C	P	3.0	200.00	600.00					0	\$90.00	\$0.00

249-4999	FRAME	12/2/2015	0.245/0.235 WAS 0.170, REMOVED CIRCULAR CUT, 0.38 WIDE SLOT, AND 0.145 SLOT, ADDED BLACK OXIDE / OIL DIP	1	249-4999-B	C	6.0	200.00	1,200.00					0	\$90.00	\$0.00
249-ATP	PLANET CAGE	4/15/2015	REDRAWN IN SOLIDWORKS, GEAR DATA ADDED	2	249-ATP-B	C	1.5	200.00	300.00	I08584-1-0	3.00	273	MILL 1	1.50	\$90.00	\$135.00
249-ATP-1	GEAR CASE RING GEAR	3/11/2015	CORRECTED GEAR DATA	2	249-ATP-1-C	C	1.5	200.00	300.00						\$90.00	\$0.00
249-MET	PLANETARY CAGE	8/19/2015	1.668/1.665 WAS 1.683/1.680	1	249-MET-D	C	1.5	200.00	300.00	I07691-1-0	1.00	204	MILL 1	2.00	\$90.00	\$180.00
249-MET-DS	DRIVE STAGE	1/23/2015	CHANGED DIMS BY CUSTOMER REQUEST	3	249-MET-DS-D	C	3.0	200.00	600.00	I07923-1-0	2.00	347	CYL. GRIND	1.50	\$90.00	\$135.00
249-RP05-DS	GEAR CAGE	10/10/2014	CORRECTED DIMENSIONS AND REMOVED REAM AFTER H.T. DIM.	3	249-RP05-DS-G	P	1.5	200.00	300.00	I07425-1-0	2.00	155	TURN 1	3.00	\$90.00	\$270.00
249-RP0503	GEAR CAGE	4/21/2016	ADDED TOLERANCE TO 0.2480	1	249-RP0503-G	S	1.5	200.00	300.00	I07475-1-0	1.00	153	TURN 1	3.00	\$90.00	\$270.00
249-RP1KD2-03	GEAR CAGE	4/13/2015	CHANGED TOLERANCE, ADDED CENTERDRILL, REMOVED GRIND	2	249-RP1KD2-03-E	C	3.0	200.00	600.00	I07302-1-0	1.00	155	TURN 1	2.50	\$90.00	\$225.00
249-RP1KD2-DS	GEAR CAGE	9/26/2014	CHANGED MATERIAL CALLOUT	4	249-RP1KD2-DS-E	C	1.5	200.00	300.00	I07331-1-0	2.00	155	TURN 1	2.50	\$90.00	\$225.00
249-RP1KD2-DS-1	GEAR CAGE	1/18/2016	1.586 DEEP WAS 1.578/1.588 DEEP	2	249-RP1KD2-DS-1-F	C	1.5	200.00	300.00	I07433-1-0	2.00	155	TURN 1	2.50	\$90.00	\$225.00
249-RP2KD4-02	GEAR CAGE	4/11/2016	REMOVED Ø0.311 HOLE PATTERN	2	249-RP2KD4-02-E	S	1.5	200.00	300.00	I08578-1-0	1.00	153	TURN 1	4.00	\$90.00	\$360.00
249-RP2KD4-03	GEAR CAGE	4/29/2015	ADDED #2 CENTERDRILL	2	249-RP2KD4-03-G	S	1.5	200.00	300.00	I07673-1-0	1.00	155	TURN 1	2.50	\$90.00	\$225.00
249-RP2KD4-DS	GEAR CAGE	4/17/2015	UPDATED MODEL TO SHOW CHAMFER FROM REAMER	3	249-RP2KD4-DS-G	S	1.5	200.00	300.00	I07432-1-0	2.00	128	TURN 1	2.50	\$90.00	\$225.00
249-RP3KD3-02	GEAR CAGE	4/11/2016	REMOVED Ø0.311 HOLE PATTERN	2	249-RP3KD3-02-H	S	1.5	200.00	300.00	I08338-1-0	1.00	153	TURN 1	4.00	\$90.00	\$360.00
249-RP3KD3-03	GEAR CAGE	9/17/2015	ADDED CENTERDRILL NOTE	2	249-RP3KD3-03-G	S	1.5	200.00	300.00	I08077-1-0	1.00	155	TURN 1	2.50	\$90.00	\$225.00
249-RP3KD3-04	GEAR CAGE	4/14/2015	ADDED MISSING ANGLE AND CORRECTED DIMENSION	5	249-RP3KD3-04-K	C	1.5	200.00	300.00	I07322-1-0	1.00	155	TURN 1	2.50	\$90.00	\$225.00
249-RP3KD3-DS	GEAR CAGE	4/16/2015	ADDED CHAMFER LEFT BY REAMER	3	249-RP3KD3-DS-J	S	1.5	200.00	300.00	I07292-1-0	2.00	128	TURN 1	2.50	\$90.00	\$225.00
249-RP6KD5-02	GEAR CAGE	4/11/2016	REMOVED Ø0.311 HOLE PATTERN	2	249-RP6KD5-02-D	S	1.5	200.00	300.00	I08625-1-0	1.00	153	TURN 1	4.00	\$90.00	\$360.00
249-RP6KD5-03	GEAR CAGE	4/25/2016	0.3105 WAS 0.3115	1	249-RP6KD5-03-F	S	1.5	200.00	300.00	I08668-1-0	1.00	155	TURN 1	2.50	\$90.00	\$225.00
249-RP6KD5-04	GEAR CAGE	4/25/2016	0.3730 WAS 0.3745/0.3740	1	249-RP6KD5-04-F	S	1.5	200.00	300.00	I07428-1-0	2.00	128	TURN 1	2.50	\$90.00	\$225.00
249-RP6KD5-DS	GEAR CAGE	9/26/2014	CORRECTED STACK UP DIM.	3	249-RP6KD5-DS-F	S	1.5	200.00	300.00	I07154-1-0	2.00	128	TURN 1	2.50	\$90.00	\$225.00
254-ATP	SPINDLE	4/16/2015	REDRAWN IN SOLIDWORKS, ADDED GEAR AND SPLINE DATA	2	254-ATP-C	C	3.0	200.00	600.00	I08583-1-0	2.00	159	Turn 2	1.50	\$90.00	\$135.00
701-714	SPINDLE	4/24/2015	ADDED TOLERANCE TO Ø0.621	2	701-714-F	S	1.5	200.00	300.00					0	\$90.00	\$0.00
701-717	END PLATE	4/29/2015	REMOVED UNDERCUT AND SLOT	2	701-714-C	S	1.5	200.00	300.00					0	\$90.00	\$0.00
1009119	HUB	9/15/2015	ADDED CENTERDRILL #1 PERMISSABLE, ADDED 60° INCL., ADDED Ø0.281 CENTER	1	1009119/A527-C	C	3.0	200.00	600.00	I08114-1-0	6.00	347	CYL. GRIND	1.50	\$90.00	\$135.00
1009598	PLANET CAGE	3/21/2016	ADDED Ø1.000 DIM	1	1009598-E	P	1.5	200.00	300.00	I08463-1-0	1.00	205	MILL 1	2.00	\$90.00	\$180.00
1010747	INTERNAL GEAR	4/22/2015	CHANGED DIMENSION ON LIP AND RADIUS	1	1010747-C	S	1.5	200.00	300.00					0	\$90.00	\$0.00
1013858	INTERNAL GEAR	3/3/2015	REMOVED Ø0.123/0.125 REAM THRU. Ø3/16 C'BORE 1/64 DP. DIM., REMOVED R5/16 X 3/8 WIDE CUT, FIXED +0.006/-0.000	1	1013858/A544-D	C	3.0	200.00	600.00	I08126-1, 20436-1	1.00	106	TURN 1	1.00	\$90.00	\$90.00
1015641	INTERNAL GEAR	3/3/2015	Ø1.743 +0.006/-0.000 WAS Ø1.743 +0.000/0.006 Ø1.6253/1.6250 WAS Ø1.630/1.625	1	1015641/A548-F	C	1.5	200.00	300.00	I08125-1, 20435-1	1.00	106	TURN 1	1.00	\$90.00	\$90.00
1024419-2	VALVE INSERT	1/16/2015	0.383/0.382 WAS 0.376/0.375, ADDED MATERIAL; BRASS	1	1024419-2-C	C	1.5	200.00	300.00	I07252-1-0	1.00	126	TURN 1	2.00	\$90.00	\$180.00
1032011	THROTTLE HANDLE	3/30/2016	2.464 WAS 2.484, 0.583 WAS 0.563	1	1032011-B	S	3.0	200.00	600.00					0	\$90.00	\$0.00
P-79	ROTOR	3/18/2015	ADDED O.A.L. AND TOOTH DEPTH DIMS	1	P-79/B273-F	C	1.5	200.00	300.00	I07769-1-0	6.00	347	CYL. GRIND	2.00	\$90.00	\$180.00
P-80	CYLINDER	9/1/2015	I.D. TURN Ø1.981/1.979 WAS Ø1.983/1.981, WEB THICKNESS 0.433/0.431 WAS 0.427/0.425	2	P-80-A	C	1.5	200.00	300.00	I08079-1-0	2.00	306	INT. GRIND	2.00	\$90.00	\$180.00
R44H-3	LINER	1/6/2015	CLASS 40 GRAY IRON WAS 8620 OR 86L20, REMOVED H.T.	1	R44H-3-B	C	1.5	200.00	300.00	I07393-1	8	460	Deburr	0.5	\$90.00	\$45.00
ST825-2	HOUSING	10/28/2015	CHANGED H.T.; 4140/4142 WAS 4135	1	ST825-2	C	1.5	200.00	300.00					0	\$90.00	\$0.00
ST825-3	CAP	10/29/2015	12L14 WAS 12L15	1	ST825-3	S	1.5	200.00	300.00					0	\$90.00	\$0.00

Total Eng Cost 105,000.00 \$22,252.50 Total Production Cost

Total Eng/Prod \$127,252.50